

Field Report

Kilauea Point National Wildlife Refuge

■ 1.0 Summary

The Kilauea Point National Wildlife Refuge is a 203-acre refuge on the northern shore of the island of Kauai. Kilauea Point has rocky cliffs that have served as seabird nesting areas for thousands of years. It provides coastal nesting areas for several species of native Hawaiian seabirds, including Hawaii's state bird, the endangered nene goose, which is making a comeback after reintroduction efforts. Extensive habitat restoration efforts have also established the refuge as home to many native Hawaiian plants. There is a buried fenceline around the perimeter of the refuge to protect breeding seabirds and the nene goose.

The Kilauea Point National Wildlife Refuge was established to provide a protected habitat for native and endangered plant and wildlife species. It also strives to be a visitor destination, providing visitors with unique opportunities to view and enjoy the wildlife living on the refuge, and serving to educate visitors about the importance of each species and generally provide them with a positive environmental experience. The refuge was part of a statewide recovery program begun in 1991 for the reintroduction of the endangered nene goose. The waters off Kilauea Point were designated a National Marine Sanctuary in 1992, a designation designed to help protect endangered humpback whales, which migrate to the waters each year.

The Kilauea Point National Wildlife Refuge could be a candidate for expanded alternative transportation systems (ATS), either separately or in conjunction with a broader system serving the North Shore of Kauai including the Hanalei National Wildlife Refuge, and the Huleia National Wildlife Refuge.

1. Point-to-Point Shuttle to Kilauea Point. This alternative would provide a shuttle from Kilauea Town to the wildlife refuge. It would employ the largest vehicles transit that could safely operate on the access drive to the refuge parking area.
2. Community Transit Service on North Shore of Kauai. This service would represent an expansion of or complement to the existing county bus service on Kuhio Highway. It would be operated frequently enough to afford an attractive alternative to driving for visitors and residents.

■ 2.0 Background Information

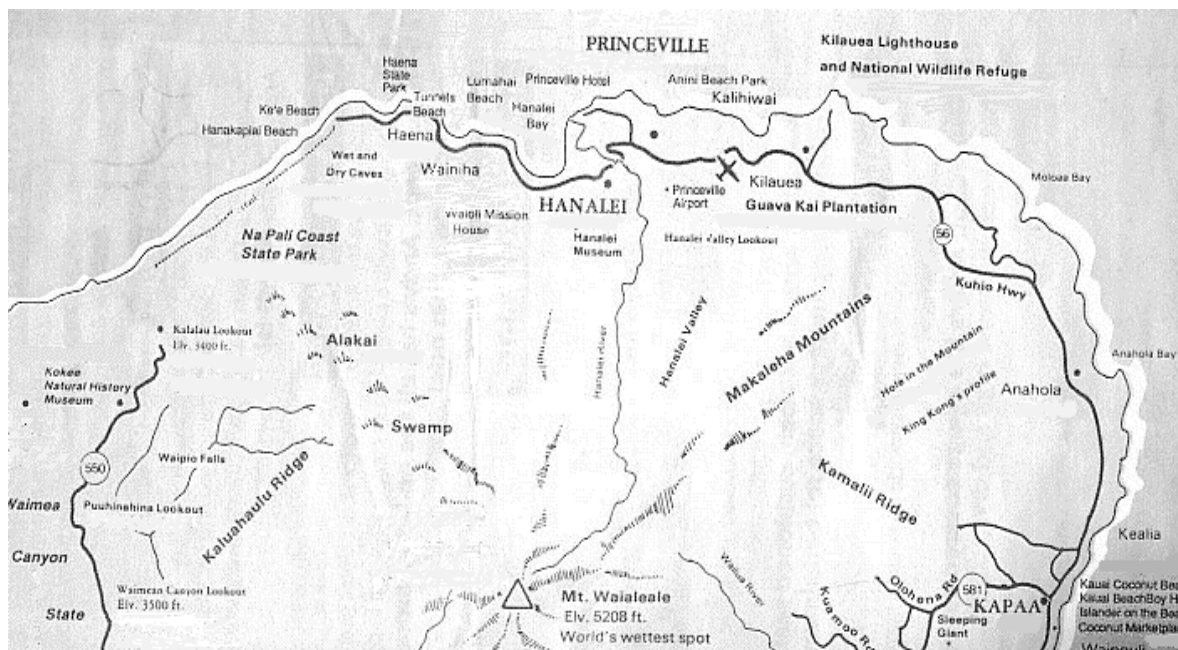
2.1 Location

Kilauea Point National Wildlife Refuge is located on the northeast coast of the island of Kauai, Hawaii. It is approximately 24 miles from Kauai's Lihue Airport. The refuge is accessed from the end of Lighthouse Road in the Town of Kilauea. Lighthouse Road is accessed by a turnoff from the Kuhio Highway onto Kolo Road at the town of Kilauea.

The Hanalei National Wildlife Refuge is located near the town of Hanalei, which is about 8.5 miles from the town of Kilauea. Most of the refuge is closed to public use, but the area can be viewed from an overlook off the main highway (Kuhio Highway) near the Princeville shopping center.

The Huleia National Wildlife Refuge is located on the southeast side of Kauai near the Menehune Fish Pond. Most of the refuge is closed to the public, but can be seen from the Menehune Fish Pond Overlook.

Figure 1. Kauai's North Shore



2.2 Administration and Classification

All three of the wildlife refuges mentioned above, Kilauea Point, Hanalei, and Huleia National Wildlife Refuges, are under joint management by the USFWS. The same USFWS staff members are responsible for all three units.



2.3 Physical Description

At the end of Kilauea Lighthouse Road, as visitors approach Kilauea Point, there is a turn-around area overlooking Kilauea Point where visitors are instructed to proceed through a gate. Visitors proceed through the gate down a steep and narrow access road to the parking area below for the refuge and lighthouse. The width and grade of the road restricts its use by pedestrians and larger tour buses, and signs are posted prohibiting pedestrian travel. Some visitors are parking at the circle entry and walking to the refuge despite the postings, adding to the congestion at the entry and making it more difficult for large tour buses to turn around.

At the end of a 0.2-mile walk from the parking area, visitors may enjoy a visitor center that features interpretive displays and dioramas about native Hawaiian habitats and wildlife. Another short walk to the point takes visitors to the Kilauea Point Lighthouse, which was built in 1913. The Lighthouse, which is open to the public and is still lit on special occasions, was placed on the National Register of Historic Places in 1979.



Near the Lighthouse is a bookstore, which is run by the Kilauea Point Natural History Association. Visitors may take a guided hike up Crater Hill, an otherwise closed section of the refuge, to overlook areas offering dramatic views of Kilauea Point and the surrounding cliffs.

The Kilauea Point National Wildlife Refuge is considering plans to create a hiking trail from the point of the circle entry up to the top of Crater Hill. It is also considering a redesign of the circle entry that would lower the vegetation to permit the creation of a Lighthouse overlook at that location and to reduce traffic and parking conflicts near the gate. Preliminary plans also call for the use of crushed coral for roadside parking areas that would enable grass to grow on the parking surface. Other plans include the extension of a bicycle/pedestrian trail through the Town of Kilauea out to Kilauea Point.

A second refuge on the island of Kauai is the Hanalei National Wildlife Refuge. Established in 1972, the Hanalei National Wildlife Refuge is the largest of the three refuges at 917 acres in Hanalei Valley. The public is not permitted to enter this refuge without a special use permit. One trail is available in the refuge, with a parking lot immediately across the road from the trailhead. Signage in the trailhead parking area alerts users that when the parking lot is full, the trail is full. The hillsides around the valley are wooded primarily in exotic species, with some native species. The Hanalei River runs through the refuge, providing water for wildlife and wetland agriculture, such as Taro farming, and wildlife including several species of waterfowl. The Hanalei Valley is an important location for Taro farming for over 1,000 years.



A third refuge is the Huleia National Wildlife Refuge. The Huleia National Wildlife Refuge is located on the southeast side of Kauai, adjacent to the Menehune Fish Pond. The refuge is approximately 240 acres of land, consisting primarily of steep wooded slopes and flat bottomlands along the Huleia River. The refuge provides a habitat for four species of endangered waterbirds and migratory waterfowl and shorebirds.

2.4 Mission and Goals of the National Wildlife Refuge

The Hanalei and Huleia wildlife refuges were established primarily for the purpose of habitat preservation and the protection of wildlife. Management programs at these two refuges focus on the reintroduction of native plant species, the support of taro farming practices, and creating nesting areas that are safe from predators.

2.5 Visitation Levels and Visitor Profile

The Kilauea Point National Wildlife Refuge receives approximately 225,000 visitors per year. This estimated visitation is calculated based on the entrance fees collected by the refuge, and does not include those visitors that do not pay the fee, such as those with passes and children visiting as part of a school tour. It also does not include visitors who travel in tour buses and others who stop at the loop turnaround, and do not pass the fee collection point. Due to these omissions, it is probable that the actual number of annual visitors is significantly higher than the fees would indicate. The average visitor spends about 20-30 minutes at the refuge. No official information has been collected regarding the characteristics of refuge visitors, but there is a general belief among refuge staff that many of the visitors are return visitors to Kauai. Visitation at the Kilauea National Wildlife Refuge appears to be tied to general visitation to the island, which has declined in recent years, primarily due to the struggling Asian economy and the lingering effects of Hurricane Iniki. It is estimated that approximately one-third of the visitors to the island of Kauai go to the Kilauea Point National Wildlife Refuge.

■ 3.0 Existing Conditions, Issues and Concerns

The current “carrying capacity” for the Kilauea Point National Wildlife Refuge is determined primarily by the amount of parking available. Resource impacts from visitor use are limited to soil compaction and damage to grass in areas of concentrated use. At the present time, the wildlife is not being negatively impacted by the number of visitors to the refuge. The primary resource concern for the Hanalei National Wildlife Refuge is the overuse of the Hanalei River by canoeists and kayakers.

3.1 Transportation Conditions, Issues and Concerns

The primary transportation issue at Kilauea Point National Wildlife Refuge is limited access. Currently, visitors to the refuge travel to the end of Lighthouse Road where a circle entry to the refuge is located. The circle entry is very small and is not designed to allow parking or stopping, other than to allow the driver of the vehicle to pause to read the sign directing him/her to proceed through the access gate. Only private vehicles and small van-type shuttles are allowed down the road past the circle entry to the refuge. The road past the gate is considered too narrow to accommodate pedestrians and tour buses. As a result, tour bus passengers are permitted to view the Kilauea Point Lighthouse and Wildlife Refuge from the overlook at the circle entry only. Currently, 25-passenger tour buses, such as Roberts Tours, bring visitors to the circle entry and have to negotiate the tight turnaround. Also, refuge parking beyond the access gate is very limited. Currently, visitor parking at the refuge consists of 33 formal parking spaces, and approximately 17 unofficial spaces on grass areas adjacent to formal parking lots.



The Hanalei National Wildlife refuge is not open to the public, with the exception of one trail. However, the refuge can be viewed from an overlook which is located at a pull-out on the east-bound side of the Kuhio Highway. The location and design of the pull-out is considered to be dangerous, however. To address this concern, the U.S. Fish and Wildlife Service, along with principals of the Princeville Corporation, are considering plans to move the Hanalei Valley National Wildlife Refuge overlook to a new location that would provide increased safety and would accommodate more visitors.

Public transit service on the island of Kauai is limited. In the aftermath of Hurricane Iniki in 1992, a public bus service was begun by the county with the assistance of FEMA funds. The county has continued the bus service to date. It is a limited service with stops at most major towns and attractions along the main coastal highway on the island. Regular one-

way fare is \$1.00, and carry-ons are limited to the size of a shopping bag. Frequency of service varies depending on the route and time of day, but typically provides four runs a day through each community in the service area. No backpacks are allowed.

Bicycling

The county of Kauai is currently considering the creation of a bikeway from Lihue Airport to Lydgate Beach on the east side of the island. Another potential bike path is being discussed would run from Lydgate Beach to Anahola.

As previously mentioned, plans are being considered for the extension of a bicycle/pedestrian trail through the town and out to Kilauea Point.

Residents of Kauai and Hanalei expressed a desire for improvements to and the expansion of the bicycle trail network, though bicycle travel is not a category within the definition of Alternative Transportation for purposes of this study. If bicycle improvements are considered at some point, residents would prefer off-highway bike paths for safety considerations.

Bridges

The Kuhio Highway has a series of one-lane bridges west of the town of Kilauea, one of which is the subject of a controversial proposal for conversion to a two-lane bridge. The bridge at the center of the controversy is located between the Town of Kilauea and the Town of Hanalei. There is strong community opposition to expanding the bridge stemming from the concern that an added lane will change the character of the bridge and its environs, as well as potentially increase traffic to and from locations on either side.

3.2 Community Development Conditions, Issues and Concerns

Currently, the Kilauea Point National Wildlife Refuge has a good relationship with the community of Kilauea. Since its evolution from a sugar plantation town in the late 1970s, the Town of Kilauea has been working to establish its identity. The town was essentially a “company town” until the 1970s when the sugar mill closed. Since that time, the community’s economic base has become broader-based, but it has also evolved into bedroom community for the Town of Princeville, where most Kilauea residents are employed.

Prior to Hurricane Iniki in 1992, there was less local traffic through the Town of Kilauea than in 1998, but there was more visitor traffic. Current visitor traffic on Kilauea Lighthouse Road, is lower than 1992, but the local traffic has increased due to land use changes, such as the construction of a new subdivision in Kilauea, and the relocation of the Post Office.

A new subdivision is being planned on the west side of town. Many residents of Town of Kilauea would like to limit further development within the community. Believing that rapid growth in the area would damage the town’s character, Kilauea residents are reluctant to participate in planning efforts.

Other concerns of the Kilauea community include the following:

- Impacts of tourists on cultural resources, natural resources, and transportation infrastructure are a major concern.
- Residents do not want overbuilding of the circle entry to the refuge in an effort to accommodate more visitors
- Residents are experiencing increasing difficulty in accessing beaches as more large lot residential development is taking place adjacent to the beach areas and cutting off traditional access routes.
- Residents of the North Shore of Kauai are concerned with preserving the view of the Taro fields at the Hanalei Valley overlook.
- Residents of the North Shore communities of Kauai, including Kilauea, feel very strongly about being involved in any decision that affects their community. The North Shore communities are very vocal and value participatory decision-making.
- Hawaiian organizations on the island of Kauai are working to decrease vehicular traffic on all roads.

Concerns expressed by the Hanalei community include the following:

- Impacts of tourists on cultural resources, natural resources, and transportation infrastructure are a major concern.
- The Hanalei community would like to reduce the number of cars on the roads – both between towns and within communities.
- The community expressed a strong desire for additional bicycle/pedestrian bike ways and paths, as well as improvements to existing bicycle/pedestrian facilities, within their community and in the surrounding areas.
- The Hanalei community expressed its preference for funding alternative travel options rather than changing or widening roads to accommodate more cars.
- The Hanalei River has been designated an American Heritage River which requires the coordination of planning efforts among planning entities in the Hanalei vicinity.
- The current public transportation system, consisting of the bus service established after Hurricane Iniki, fails to provide transportation for hikers and backpackers due to the carry-on baggage size restriction. This forces those who wish to engage in these activities on the island of Kauai to rent a car or hitchhike to and from their destinations.
- Intergovernmental cooperation would be helpful in addressing some traffic and parking issues. For example, there is significant congestion at Ke'e Beach, where the Kuhio Highway ends on the North Shore of the island. At that location, the trail on

one side of the parking area is owned by the state, and the land on the other side is owned by the county.

- It is very important to members of the Hanalei community that they be given an opportunity to participate in decisions affecting their community.

The Huleia community raised the following concerns:

- Impacts of tourists on cultural resources, natural resources, and transportation infrastructure are a major concern.
- The area around the Huleia has cultural sites and burial grounds that should be protected under Section 106 of the National Historic Preservation Act.
- Resources on the island of Kauai are undervalued. Fees should be increased to more accurately reflect value received, and to be competitive with similar activities elsewhere. Visitors should pay for improvements.
- The transportation system on the island of Kauai is already at capacity currently, and increased numbers of visitors will only exacerbate the problem. A suggestion was made to establish a carrying capacity for private vehicles on the island of Kauai, and freeze the number of vehicles allowed at that limit. Opposition to this proposed effort can be expected from rental car companies.
- Kauai would be a good location for public transportation.
- Funding of roads on Kauai is very poor.
- The Kuhio Highway between Lihue and Kapaa is dangerous.
- Better coordination is needed between federal, state, and county agencies.
- Any transportation improvements should consider the cultural resource impacts.
- It is very important to members of the Huleia community that they be given an opportunity to participate in decisions affecting their community.

A concern of some residents in various locations on the island of Kauai pertains to a change that could affect the entire island: Plans for the lengthening of runways at Lihue airport, allowing larger planes to land bringing more tourists to the island, and increasing traffic.

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

The natural resource issues related to transportation are:

- The Fish and Wildlife Service is striving to maintain the character and appearance of Kilauea Point in a culturally and historically appropriate manner. These challenges

include maintenance of the vegetative cover, such as the grass by the interpretive signs and the lighthouse, as well as structural maintenance. This issue is related to transportation in the sense that increased transit or transportation improvements could result in an increased number of visitors to the site, increasing daily use of the facilities, resulting in increased maintenance requirements.

- The U.S. Fish and Wildlife Service, along with principals of the Princeville Corporation, are considering plans to move the Hanalei Valley National Wildlife Refuge overlook to a new location. The new location would be safer and could accommodate more visitors in a new visitor center. However, the proposed new site would also be adjacent to a religious site. Plans for the relocation of this overlook will need to include consideration of the cultural and religious sensitivities associated with the area. In addition, overlook relocation plans will need to address community concerns about the views from their neighborhoods up to the overlook.
- In the community of Huleia, near the Huleia National Wildlife Refuge, residents are concerned about the overuse of the Huleia River by people using canoes and kayaks. One of the complicating factors is the lack of an appropriate location for vehicles to pick up boaters to take them away from the river area. This has been a controversial issue for several years. Negotiations have taken place and have resulted in the establishment of some limits on use agreed to by both the operators of boat rental companies and community residents.

3.4 Recreation Conditions, Issues and Concerns

Several recreation-related issues have been described in the Transportation Issues, Community Issues, and Natural Resource Issues sections of this report. In order to maintain a positive visitor experience, for purposes of both education and enjoyment, many of these previously mentioned issues overlap with the overall visitor experience. Examples include the design of Kilauea's entry and overlook, visitor access to the Refuge and Lighthouse, and the preservation of Kauai's cultural resources. An example from the Hanalei refuge area is the effort to protect the Hanalei River from overuse while accommodating boating activity on the river.

■ 4.0 Planning and Coordination

4.1 Unit Plans

Formal written plans for the Kilauea Point National Wildlife Refuge were not available. However, the refuge is considering plans for the following projects (also discussed in other sections of this report):

- Expanding the bike/pedestrian trail through the Town of Kilauea out to Kilauea Point.

- Creating a hiking trail from the Kilauea Point circle entry/turnaround up to the top of Crater Hill.
- Redesigning the circle entry/turnaround point at the Kilauea Lighthouse overlook area.
- Moving the Hanalei Wildlife Refuge overlook area and building a new visitor center.

4.2 Public and Agency Coordination

As mentioned in the Community Conditions, Issues and Concerns section above, some residents of Kawaii communities have expressed dissatisfaction with federal, state, and county agency coordination (or lack thereof).

ATS development will need to be coordinated with ongoing agency activity on the island. A Master Plan for roads in the North Shore area of the island is currently in the early stages of development through the State Department of Transportation. The initial scope of work for this project is being defined, and a contractor will be selected soon. A second project is the development of a Master Plan for the Kee Beach State Park area at the north end of the Kuhio Highway, where parking is extremely congested. The State Parks and Recreation Department is in charge of this project. Also, an Environmental Impact Statement is being conducted on the segment of the Kuhio Highway from Lihue to Kapaa. It is expected that six lanes may be needed for this section of the highway, and a possible bypass around Kapaa is under consideration. Another Planning Study is being done for the Kuhio Highway between Lihue and Poipu.

The Fish and Wildlife Service is currently coordinating with the Princeville Corporation on plans to move the Hanalei Valley National Wildlife Refuge overlook to a new location. This public/private partnership would involve the sharing of resources and collaborative efforts on trails. If successful, it may be a model for future projects in communities with federally managed lands.

■ 5.0 Assessment of Need for ATS

Access to Kilauea Pt. National Wildlife Refuge is limited by the size of the parking lot and the steep, narrow access road leading from the entrance gate to the parking area. Pedestrians and large vehicles are prohibited from using the road. As a result visitors on organized tours and people parking outside the gate can not enter the refuge. It is likely that entry fee collections could be increased if the visitors who now view the refuge from the gate area could reach the visitor center and lighthouse area. The refuge plans to improve the turnaround loop at the gate and to make minor improvements to facilitate roadside parking in the gate area. A trail also is planned. These improvements would allow some additional use to occur without the need for visitors to reach the parking area near the visitor center.

Carrying capacity studies have not been conducted for the refuge, so it is not possible to determine if more visitors could be accommodated without damaging resources or degrading the visitor experience. The refuge managers believe that the existing visitor use is not harming the wildlife and that measures could be taken to address the damage to vegetation that occurs from visitor use.

The town of Kilauea, and communities along the North Shore of Kauai are concerned about traffic and other detrimental impacts of increasing tourism. Increasing visitor use to Kilauea Point could result in higher volumes of traffic along Lighthouse Road. Overall growth in visitation to the North Shore, including Kilauea Point and Hanalei Wildlife refuges and the numerous beaches could result in higher volumes of traffic throughout the area. Existing one-lane bridges limit the capacity of the roadways and residents are opposed to widening the bridges. Parking areas serving beaches on the North Shore are inadequate and illegal roadside parking by beach users causes safety and congestion problems.

ATS could play a role in managing the traffic impacts associated with visitor use on the North Shore while accommodating increased visitation and associated tourism revenues. Potential development projects and the planned relocation of the Hanalei refuge overlook afford an opportunity to consider ATS solutions for Kilauea Point alone or the greater North Shore area.

5.1 Magnitude of Need

If an ATS were to serve Kilauea Point, the existing access system would need to be revamped. The access road to the visitor center area is too steep and narrow to accommodate private vehicle traffic and ATS traffic. The road could probably accommodate small-to-medium sized ATS vehicles operating without interference or conflicts from private vehicles. As a result, an ATS solution for the Kilauea Point Wildlife Refuge would replace access by private vehicles and it would need to serve all refuge visitors when in operation.

The justification for implementing an ATS for access to the refuge would be:

- To provide access to the refuge to visitors using tour buses and other vehicles that are too large to travel on the entry drive;
- To reduce the impact of visitor traffic on the community of Kilauea;
- To provide interpretation of the refuge and its resources in advance of visitors' arrival (using prerecorded tapes or driver narration) to enhance resource protection and visitor understanding; and
- To reduce the visual impact and resource damage associated with visitor vehicles.

ATS could serve a broader range of transportation and community enhancement needs on the North Shore of Kauai. The existing one-lane bridges and narrow roads serving community circulation and visitor access needs can not accommodate large increases in traffic. Parking areas serving beaches and other features are already inadequate to meet visitor

demand. Traditional access routes to beaches are being interrupted by private development. Ongoing residential and resort development in Princeville, future growth in the general market for tourism to Kauai, and commercial development (such as the Guava Kai plantation) are likely to create increased demand for travel. The need for transportation improvements is likely within the next few years.

An ATS option that served all of the recreation sites and communities on the North Shore, from Kilauea Point to Kee Beach could be considered as a means to improve access for visitors and residents and to protect community values. The demand patterns for the community-wide ATS would be different than those for the Kilauea Point ATS because other recreation sites and community destinations would likely have longer stay durations and would have a lower hourly demand rate.

5.2 Feasible Alternatives

Two alternatives have been developed to illustrate the range of potentially viable ATS options on the North Shore of Kauai. One alternative would provide a shuttle from a newly developed parking area in or near the town of Kilauea on Kuhio Highway. The second alternative would provide a bus route connecting the communities and the major recreation sites along Kuhio Highway from Kilauea to Kee Beach. These alternatives are intended only to provide an illustration of the range of ATS options. Detailed planning and conceptual design work would be required to confirm the feasibility of an ATS for Kauai and to identify the most appropriate ATS solutions for this area.

1. **Point-to-Point Shuttle to Kilauea Point.** This alternative would provide a shuttle from Kilauea Town to the wildlife refuge. It would employ the largest vehicles transit that could safely operate on the access drive to the refuge parking area. This analysis assumes that the shuttle system would be intended to accommodate visitor demand equal to the capacity of the visitor center parking lot, plus existing tour bus demand, plus an assumed level of existing use by visitors in private vehicles who stop at the turnaround. The service would be operated on a year-round basis for about eight hours per day.
2. **Community Transit Service on North Shore of Kauai.** This service would represent an expansion of or complement to the existing county bus service on Kuhio Highway. It would be operated frequently enough to afford an attractive alternative to driving for visitors and residents. It could be expected to be attractive to users of the state parks and other beaches along the shore, which have inadequate parking and congested access today. Access to the bus service would be available at two or more parking areas and, potentially, from bus stops in the communities and at the major resorts. Stops would include the parking facility for Kilauea Point NWR (assuming that Alternative 1 was implemented), Princeville, a new overlook for Hanalei NWR, Hanalei Town, and the beaches and parks west of Hanalei. This service would be operated on a year-round basis over a eight- to 10-hour day.

Table 1. Characteristics of the ATS Alternatives

Characteristic	Alternative 1 – Kilauea Point Shuttle	Alternative 2 – Community Transit Service for North Shore of Kauai
Annual Visits – Existing	225,000	NA
Buses	10 25-passenger buses/vans	four 25-passenger buses/vans
Route Length	four miles, round trip	35 miles, round trip
Parking Spaces in New Lot	120 spaces	50 to 100 spaces in two or more locations
Time Between Buses (Peak Hours)	three minutes	30 minutes
Riders Per Hour (Peak Hours)	410 each way	25 to 35
Riders Per Year	Up to 278,000 round trips	75,000 to 80,000 boardings

These characteristics are illustrative of the type of transit service that could meet the needs of visitors to Kilauea Point National Wildlife Refuge and visitors to the North Shore of Kauai. More detailed planning is needed to make a final determination of the need for transit service and the characteristics of a transit system that would be best-suited to the needs in the area.

■ 6.0 Bibliography

Electronic Mail message from Dave Aplin (USFWS) to Devon Buckels (BRW). September 5, 1999.

Electronic Mail message from Devon Buckels (BRW) to Tom Alexander (USFWS) and Dave Aplin (USFWS). November 4, 1999.

Internet site: <http://www.alternative-hawaii.com/activity/keco1.htm>. Information printed August 4, 1999.

Internet site: <http://www.kauaigov.org/parksnrec.html>. Information printed August 2, 1999.

Internet site: <http://www.refuges.fws.gov/>. Information printed August 1999.

“Hanalei.” Internet site: <http://www.recreation.gov/detail.cfm?ID=1417>. Information printed August 3, 1999.

“Kilauea Point NWR.” Internet site: <http://www.recreation.gov/detail.cfm?ID=1454>. Information printed July 13, 1999.

“Kaua’i 2020 Vision Statement.” Internet site: <http://waimea.hawaiian.net/kgpu/2020.html>. Information printed August 2, 1999.

“Kauai: The Garden Isle.” Map. Kauai Beach Press. August 2 – 5, 1999. p. 4.

Maps printed from Internet site: <http://www.mapquest.com/>. September 16, 1999.

■ 7.0 Persons Interviewed

Michael Loo, Princeville Corporation. August 13, 1999

Glenn Y. Yamamoto, Assistant District Engineer, Hawaii Department of Transportation. August 13, 1999

Meeting Held August 13, 1999. Attendees: Bill Byrne (BRW), Sylvia McLinn(Roberts Tours), Marcy Torres (Polynesian Adventure Tours), David K.K. Kahaunaele, Jr. (Roberts Tours), David Boynton (KPNHA/Garden Island), Devon Buckels (BRW), Noreen Bantista (USFWS), and Nathan Kawaguchi (Akita Enterprises)

Meeting Held August 13, 1999. Attendees: Devon Buckels (BRW), Leilani Suenaga Kanotto (Huleia Property Owner), Marie N. Kanoho Ornellas (Huleia Property Owner), Chuck Trembath (Huleia Property Owner), Don Heacock (DLNR/Resident), Lester Ching (Huleia Resident), (Alwin Freitas (Huleai Resident), Ruth L. Hao (Huleia Resident), Terri Goo (Huleia Resident), Joe K Goo (Huleia Resident), Cheryl Lovell-Obatake (Huleia/Natwiliwili Resident), Pomai Kane (Hanamalulu Resident), and Durgh Kane (Hanamalulu Resident)

Meeting Held August 13, 1999. Attendees: Mahaala (Affiliation Unknown), Bill Byrne (BRW), Devon Buckels (BRW), Dave Aplin (USFWS), Ben Welborn (Aloha), Gohanna Ventura (Hawaiian), Tom Alexander (USFWS)